

# SRS for Library Management

1.1 Purpose of this Document: To specify the software requirements of a Library management system.

1.2 Scope of this document - users are allowed to borrow a book post 9 am and return a book before 9 pm. Allowed to borrow only 3 books at a time, and should always produce library card while borrowing.

1.3 Overview - Detailed info about the requirements and general borrowing procedures

## 2. General description

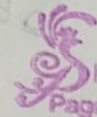
### 2.1 Product Perspective:

Library Staff Perspective: they can view the details of the book being borrowed also about the customer details borrowing the book has completed information about the working staff like name, working details, etc.

Book perspective: All information about the available books like ID, issue date, return date, author, publish date, customer who borrowed the book.

Customer perspective: Details of all available books, info on books, working hours of library, subscription price.





## 2. Product functions:

- Borrowing books.
- Returning books.
- Donating books.
- Security Systems.
- Library staff maintenance.

## 2.3 user characteristics:

Customers must have library card to borrow/return books.

## 2.4 General Constraints:

- Customers must have valid library card to borrow/return books.
- Books should be borrowed after 9am and before 9pm.
- Can borrow only 3 books at a time.
- Books can be borrowed only for 3 weeks.

## 2.5 Assumption and Dependencies:-

- Customers must ensure that the borrowed books are ~~not~~ returned in original condition.
- Donated books must be in good condition.
- Library card can be obtained only if there is a valid subscription.

## 3 Functional Requirements:

- Book Borrowing and returning system.
- Books can be borrowed by scanning the library card.



- Library Card generating system: Library cards will be provided only with valid proof of subscription in the library

#### 4. Interface Requirements:

- User Interface: Borrow - return functionality
- ~~API~~ API
- Database interface for books and customer details.
- User Authentication for generating library card

#### 5. Performance Requirements:

- Response Time: The system should respond within 2 seconds for a search query
- Security: all info should be stored safely and efficiently and should be available to users at all times.

#### 6. Design Constraints: ~~In this,~~

1. Database should be large enough to store all the info about customers, staff, book details and should be a Relational Database using MySQL.
2. Should be developed in the architecture of microservices and should be containerised

#### 7. Non Functional Attributes: Security, Reliability, Application compatibility, Data integrity, Availability, capacity, etc.





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## 8. Preliminary Schedule and Budget :

A time duration of 4 months and  
a budget of 50 Lakhs.  
Time for hiring staff, developing software,  
documentation and testing.

Law  
Tropay